

5716

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Sheet No. 11
Hydrographic }

State VIRGINIA

LOCALITY

CHINCOTEAGUE INLET

Anchorage

Assateague Inlet to Bogues Bay

Bogues, Powells & Watts Bay,

Chincoteague Inlet and Assateague
Anchorage.

1934

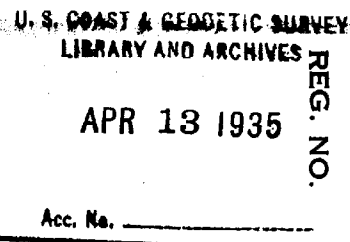
CHIEF OF PARTY

H. A. Seran

U. S. GOVERNMENT PRINTING OFFICE: 1934

5716

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 11

REGISTER NO. 5716

State VIRGINIA

General locality CHINCOTEAGUE INLET

Assateague Anchorage to Bogue Bay
Locality ~~Bogue, Powells & Watts Bay, Chincoteague Inlet & Assateague Anchorage~~

Scale 1:10,000 Date of survey Aug. 25 to Nov. 9, 1934

Vessel Sub-party Ship OCEANOGRAPHER

Chief of Party H. S. Seran

Surveyed by J. E. Waugh

Protracted by A. P. Crisfield

Soundings penciled by J. E. Waugh

Soundings in ~~XXXXXX~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by None

Inked by L. B. BERES & J. A. McCormick

Verified by L. B. BERES & J. A. McCormick

Instructions dated Apr. 27, 1933 & June 19 & Aug. 31, 1934

Remarks:

DESCRIPTIVE REPORT

HYDROGRAPHIC SHEET (Field Letter 11)

CHINCOTEAGUE INLET AND VICINITY

Sub-party Ship OCEANOGRAPHER

H. A. Seran, Commanding

PROJECT NO. H.T. 142

The descriptive report for the Hydrographic Sheet (field letter 11) which covers Assateague Inlet, Assateague Anchorage, Bogues, Powells, and Watts Bays; the creeks and sloughs leading into these bays, and parts of Chincoteague Inlet, Assateague Inlet, and Cockle Creek, is herewith submitted.

INSTRUCTIONS:

The hydrography on this sheet is part of Project No. H.T. 142, the instructions for which were dated April 27, 1933. Supplemental instructions to cover this part of the project were dated June 19, 1934 and August 31, 1934.

LIMITS AND SCALE:

This sheet was surveyed on a scale of 1:10,000. It covers all of Assateague Anchorage, Bogues, Powells, and Watts Bays, and the creeks and sloughs adjacent to these bays. It includes all of Chincoteague Inlet north and west of the line between Gunboat and Fishing Points Lights. It extends north in Assateague Inlet to Latitude $37^{\circ}-54.35' N$. The northern limit in Chincoteague Channel is the line between Chincoteague Point and Walkers Point. It extends north in Cockle Creek to Latitude $37^{\circ}-55.10' N$.

This sheet is joined on the north by sheet twelve and on the south and east in Chincoteague Inlet, by sheets twenty-one and twenty-two. Satisfactory junctions were obtained with these sheets.

CONTROL AND SURVEY METHODS:

The control on this sheet consists of third order triangulation stations, both main scheme and intersection. The triangulation stations have been supplemented by topographic signals. These signals were located on aluminum sheets.

Standard hydrographic methods were followed in developing these areas. The lines were run on ranges and were controlled by three point sextant fixes on signals on shore. It was necessary to locate the inshore end of some of the lines by an estimated distance and direction from some topographic signal. The soundings were obtained with the lead line except in depths of less than six feet, and in Bogues, Powells, and Watts Bay. A sounding pole was used in these areas.

The approximate limits of the oyster beds in Assateague Anchorage and the western end of Chincoteague Inlet are indicated by a long dash and three dots. It was impossible to determine the limits of the beds on Kill-deer shoal in Assateague Inlet. The bottom characteristic of shells is used to indicate the beds. The shallow bays on the west side of this sheet are practically all covered by oyster beds as indicated by the bottom characteristics.

Line not inked on smooth sheet. Note "Oyster Bed" was here added near limits defined by line shown in pencil and by shell nodules.

The irregular and wide spacing of the lines in the north east end of Assateague Anchorage, and Bogues, Powells and Watts Bays was in order to minimize the possibility of grounding on the oyster beds in these areas. The larger creeks leading into the bays were generally developed by running the lines near each bank and down the center of the channel. In the larger creeks a line was also run in a zig-zag manner across the creek. In the smaller creeks a single line was run down the center of the creek.

The six to thirty-foot depth curves, inclusive, are shown on the sheet. It was necessary to omit parts of these curves, especially in the narrow sloughs, as it would have been confusing had they been drawn. The low water line in all of these narrows has been omitted as the high and low water lines are approximately the same.

all curves defined by sd's except as single lines have been added in the office. H. H. H.

DISCREPANCIES:

The sounding lines cross satisfactorily. The crossings are within one foot in most cases. The channels on this sheet run between high shoals. The banks are steep and the channels proper are very narrow; therefore, there are several places on the sheet where it was necessary to omit the shoal soundings in order to give a true picture of the channel. This is especially true at the southern end of Island Hole Narrows, the channel across the eastern end of Bogues Bay, and Cat Creek. There are several places where there is a large apparent difference in the soundings on the edge of the channels, but on analysis it is found that this would be the case since the banks are steep and a small change in position makes a large difference in the soundings.

Attention is called to the following apparent discrepancies:

1. 14' 38-39e on 8'-7' 40-41e

This difference is probably due to an error in reading the lead line. There is no indication of a hole in this area. It is recommended that the shoal sounding be plotted. *Lat. 37° 53.8 Long. 75° 23.4* *

2. 13' 72-73m on 9'-8' 33-34m also 6'-7' 1-2p

The bottom in this area is very irregular. There is no indication of a hole in this area. It is recommended that the shoal sounding be plotted. *Lat. 37° 54.0 Long. 75° 25.8* *

3. 7½'-11' 16-17d on 14' 100-101m

This is on the edge of a shoal. There is every indication of a shoal water in this area and while the shoal sounding occurs near a deeper one, it is felt that this is the minimum depth on the shoal. It is recommended that the shoal sounding be plotted. *Lat. 37° 54.8 Long. 75° 23.6* *

* Field Revision in accepted. H. H. H.

4. 18' 103-104m on 12' 53-54m

This is on the edge of a shoal and it is recommended that the shoal sounding be plotted. *Lat. 37° 53.7, Long. 75° 25.4* *accepted. Hum.*

5. 9½' 4-5n

This shoal sounding occurred near mid-channel of the main channel leading through Chincoteague Inlet. It is in water of a depth of 13' and 14'. An extensive search was made to verify this sounding. Cross lines were run over and around this spot the next day and later the boat was anchored, using the fix obtained on 4n. Soundings were obtained in this area by running around the anchor and letting out more cable after each complete circle. No indication of this shoaler water was found. It is felt that this sounding was not in error when taken. On information from the local fishermen and guides, there have been known cases where shoals have built up overnight in this channel, due to adverse weather conditions, and then were cut away within a short time, due to a change in the prevailing weather. Positions 1-56z are plotted on an overlay in order not to lead to confusion of the soundings. It is submitted with the sheet. *Sounding verified. Hum. Lat. 37° 53.4, Long. 75° 24.9*
no entry available at time of review.

6. 14' 120t on 10' 38-39m

This is a very irregular bottom in this area. It is recommended that the shoal sounding be plotted. *Lat. 37° 53.6 Long. 75° 25.6* *accepted. Hum.*

7. 2' 21-22u on 9-10' 14-15u

This is on the edge of a high shoal. It is recommended that the shoal sounding be plotted. *Lat. 37° 53.5 Long. 75° 26.9* *accepted. Hum.*

CHANNELS:

The channel through Chincoteague Inlet is marked by five mid-channel buoys. The controlling depth of this channel is 9 feet M.L.W. The least depth is found 660 meters 00T in azimuth from Chincoteague Point Light. This channel is used mainly by local fishing boats of 6' - 8' draft. In entering this channel off Fishing Point, instead of making buoy "C"; deeper water across the shoal will be found by steering directly for buoy "D" from a point approximately 100 meters south of Chincoteague Inlet Bar Buoy. This does away with passing close to a 7½ foot spot which is 420 meters 134°-30'T in azimuth from Fishing Point Light. This is the channel used by local men in entering this area.

Assateague Anchorage is entered by a narrow channel between Fishing Point and the shoal making over from Assateague Point. The controlling depth of this channel is 10'. The least depth is 10' at M.L.W. which is found 575 meters, 262°-10' in azimuth from Fishing Point Light. The best water in this channel is marked by bush stakes, placed by the local oystermen. This anchorage is used only by small boats of 6' - 7' draft because of the narrow entrance.

Assateague Inlet is entered through a narrow drain that runs between two high shoals. The shoal to the westward makes off from the Sods, and the shoal to the eastward makes off from Assateague Point. The controlling depth is 3 feet at M.L.W. The least depth is found 875 meters, 165°-30' in azimuth from Fishing Point Light. The best water between the shoals and into Assateague Inlet proper is marked by brush stakes. This channel is used only by local fishermen in going to

and from their working grounds.

The entrance to the channel to the north of Wallops Island is surrounded by shoals. The best water across the shoals is found 635 meters 217°T from Gunboat Point Light. The controlling depth is 2 feet at M.L.W. The least depth of 2 feet at M.L.W. is found 635 meters 217°T from Gunboat Point Light. The Coast Pilot gives the controlling depth as 4 feet but this bar has built up and the least depth found here by the hydrographic party is two feet. From local information it was learned that the local men would not attempt to enter this channel even with boats of 2 foot draft, except on half-tide or better. The coast pilot gives the best water in this channel as 250 yards off shore. The best water at the eastern end of this channel is 100 yards off shore. The best water at the western end of this channel is 210 yards off shore.

Any boat that can cross the bar will encounter no difficulty in any of the channels in this area. Ballast, Root, Taylors Island Hole, and Kendall Narrows all head up and end in Bogues, Powells or Watts Bays.

The controlling depth for all of these narrows, creeks and sloughs in this area is the least depth over the bar given in the previous paragraph. The least depth in Ballast Narrows is 7 feet at M.L.W., which is found 1700 meters, 68°-30'T in azimuth from (Chincoteague to Hog Island) Day Beacon No. 1 (⊙ Tip). The least depth in Island Hole Narrows is 6 feet at M.L.W., which is found 466 meters, 220°-10'T in azimuth from (Chincoteague to Hog Island) Day Beacon No. 3 (⊙ Three). The dredged channel across the eastern end of Bogues Bay has an effective depth of 4 feet at M.L.W. In completing the inland water way in this area, the upper end of Cat Creek was dredged out. That part shown on the sheet has an effective depth of 5 feet at M.L.W. This is on the recommended inland water way from (Chincoteague Inlet to Hog Island). The channel is only used by an occasional pleasure craft of three or four foot draft and local oystermen. The least depth in Taylor Narrows is 12 feet at M.L.W. which is found 1750 meters, 65°-30'T from (Chincoteague to Hog Island) Day Beacon No. 1 (⊙ Tip). The least depth in Root Narrows is 4 feet at M.L.W. which is 2000 meters, 110°T from (Chincoteague to Hog Island) Day Beacon No. 1 (⊙ Tip). The least depth in Kendall Narrows is 3 feet at M.L.W. which is 350 meters, 257°-30'T from ⊙ Pig. The least depth in the channel leading from Ballast Narrows through Bogues Bay to Wishert Point is 3 feet at M.L.W., which is 155 meters, 204°-15' from ⊙ Gab. The least depth in Cackle Creek is eight feet at M.L.W., which is found 830 meters, 259°T from (Chincoteague to Hog Island) Day Beacon No. 1 (⊙ Tip). The narrows, creeks and sloughs are used by the local fishermen in the course of their daily work.

Sloop Gut is a small slough leading to Wallops Island Coast Guard Boat House. It has a least and controlling depth of ~~two~~ ^{1 1/2} feet at M.L.W., which is found 150 meters, 309°-20'T from (Chincoteague to Hog Island) Day Beacon No. 1 (⊙ Tip).

*Location uncertain.
2 feet way the
current in Oct. 37° 52' N,
long. 75° 25.2' and
Oct. 37° 53.3', long.
75° 25.4' approx.*

There is a small drain which follows the western shore of Chincoteague Inlet that is used by local fishermen in going between Bal-last Narrows and Chincoteague Channel. It has a least depth of 2 feet and is marked by bush stakes. It can be followed only with local knowledge. There is a small drain between The Sods and the high shoal off Chincoteague Point which has a least depth of one foot at M.L.W. which is used by local fishermen in going from Chincoteague Point to Assateague Inlet. It can only be used with local knowledge.

DANGERS:

Almost the entire area in Chincoteague Inlet is covered by shoals. These shoals are shifting and moving at all times. The physical characteristics are changed by each storm. All of the channels in this area pass through these high shoals.

Attention is called to the $7\frac{1}{2}$ foot sounding between positions 16-17d. It is in Latitude $37^{\circ}-52.75'$, Longitude $75^{\circ}-23.58'$. In entering the channel, this shoal can be avoided by passing to the eastward of Buoy "C" before changing the course to head for Buoy "D". Attention is also called to the shoal water in Latitude $37^{\circ}-53.45'$, Longitude $75^{\circ}-25.25'$. The least depth over this shoal is 4 feet at M.L.W. which is found between positions 20-21j. In entering Chincoteague Channel, in order to avoid this shoal, pass Buoy "E" to the southward and steer to the south of Buoy "F" so as to round Buoy "F" to the westward, and then head for a point approximately 200 meters to the west of Chincoteague Point Light. In turning Buoy "F" care must be taken not to swing wide into the 4 foot shoal in Latitude $37^{\circ}-53.63'$, Longitude $75^{\circ}-25.55'$. The least water on this shoal is 4 feet, found between positions 58-59z.

Breakers are indicated on the shoal found in Latitude $37^{\circ}-52.70'$ to $52.85'$, Longitude $75^{\circ}-24.0'$ to $75^{\circ}-24.3'$. Breakers are usually dissipated before the wave action reaches the shoals to the westward of this spot. In heavy weather this entire area is covered by breakers.

ANCHORAGE:

Assateague is the only anchorage on this sheet. In the past it could be utilized by large vessels. The entrance has been partly closed off by the shoal making out from Assateague Point and is now available to vessels of only 6 or 7 foot draft, and these should not attempt to enter without local knowledge. Once inside, excellent holding ground is found. Vessels should not anchor in less than 10 feet of water in the north east corner on account of the oyster beds found in this area.

The docks, as shown at the old fish factories in Assateague anchorage, are dilapidated and should not be used. The Assateague Coast Guard Dock is in good condition and a minimum of 12 feet of water extends 35 meters toward the shore from the off shore end of the dock.

The dock at Wisherts Point in Bogue Bay is only used by oyster boats of 2 and 3 foot draft.

Note: Charted hydrography is based due to small scale (1:50,000). Comparison with original soundings (Sp. 2178 (1926) in particular) on larger scale reveals changes which differ somewhat from those contained in this paragraph. *mean.*

COMPARISON WITH EXISTING CHARTS:

The changes in physical characteristics of the shoals and channels in this area have been very great. Attention is called to the following principal changes. The controlling depth at the entrance to Assateague Anchorage has been reduced to 10 feet. The deep water off Fishing Point Light extends further to the north. Fishing Point is approximately 0.2 mile further westward. There is no evidence of the shoal indicated on the chart in Latitude $37^{\circ}-52'.75$, Longitude $75^{\circ}-23'.40$. The shoal as shown in Latitude $37^{\circ}-52'.8$, Longitude $75^{\circ}-23'.8$ has evidently been cut away as deep water is in this area now. The small channel to the northwest of this shoal has cut through and is deeper than that indicated on the chart. The shoal indicated in Latitude $37^{\circ}-52'.8$, Longitude $75^{\circ}-24'.25$ is still there. It has built up more than shown on the chart. The deep water that is indicated on the chart to the westward of this shoal has been closed off from the main channel. The shoal lying in mid-channel to the south of Chincoteague Point has been reduced in size and the least depth found over this shoal is 4 feet at M.L.W. instead of 2 feet as indicated at the present. Attention is also called to the 4 foot shoal as indicated on the sheet in Latitude $37^{\circ}-53'.63$, Longitude $75^{\circ}-25'.55$. Deep water is shown on the chart in this area. The controlling depth to Assateague Inlet is 3 feet instead of 2 feet, as shown on the chart. The controlling depth over the bar in Latitude $37^{\circ}-53'.12$, Longitude $75^{\circ}-25'.25$ is 2 feet instead of 4 feet as shown.

A narrow deep channel still connects Cackle Creek and the channel to the north of Wallop Island. The soundings in the creeks and sloughs are still substantially the same as those indicated on the charts. Attention is called to the bar in Assateague Inlet, just north of Assateague Point, which is not indicated on the chart.

COMPARISON WITH AIR-PHOTOS:

The shore line on this sheet was transferred from Air Photo compilation No. T5201 and No. T5193 and is shown on the sheet in pencil. The low water line on the Air Photo Compilation was found to be closer inshore than the hydrographic low water line. The low water line for this reason was transferred only in those areas where the hydrography did not give it and is shown on the smooth sheet by a dotted line.

The shore line as indicated on Air Photo Compilation No. T5201 checked with the hydrography except in one place. Position No. 57e is as estimated distance and direction from Hat. An error in the estimation of the distance off this signal would probably change the position enough to check the shore line. The bank at this point is very steep and subjected to a large amount of erosion due to the swift current flowing through Assateague Inlet. This would probably account for part of the difference.

A great deal of trouble was experienced in fitting the hydrography to the shore line as indicated on Air Photo Compilation No. T5193. The compilation for this area was not received before the hydrography was completed in this area. When it was found that there was a difference between the topography and hydrography, three-point fixes with the theodolite were obtained at hydrographic signals Dam, May, and Bob. The

formerly large 4 foot shoal now has been reduced to 2 feet.

3' Sd. omitted
Shoreline shown
checked on A.P.
and found correct

See notes on next page

methods used are explained in the Descriptive Report for Graphic Control, Sheet No. E. Shore line reference was obtained at five stations. This data has been plotted and indicated on the smooth sheet by red pencil lines. At hydrographic signals Dam and Rat this data agrees satisfactorily with the topographic data. Hydrographic signal Gab is the gable of a house on a dock. The house is approximately 5 meters from the end so this gives a satisfactory check at this point. However, the shore line at triangulation station Narrows, 1934 and hydrographic signals May and Bob fail to check the shore line as transferred from the Air Photos. Therefore, the shore line for the creeks and sloughs for this area was transferred from the air photos by fitting this shore line to these reference points and the existing data obtained by the hydrographic survey. The shore line as shown on the smooth sheets and transferred in the above manner has been indicated by a dashed pencil line. The shore line, as indicated by a solid pencil line, has been transferred directly from the air photos.

Air Photo sheet T-5193 and T-5201 have not been completed as of 10/24/50. These sheets will be checked in the review of these surveys.

GEOGRAPHIC NAMES:

All of the names indicated on this sheet are well established local names.

The following names are shown on the existing charts of this area:

1. Atlantic Ocean
2. Fishing Point
3. Assateague Island
4. Assateague Anchorage
5. Assateague Point
6. Assateague Inlet
7. Chincoteague Island
8. Chincoteague Point
9. Kendall Narrows
10. Root Narrows ✓
11. Ballast Narrows
12. Taylor Narrows
13. Island Hole Narrows
14. Bogues Bay
15. Powells Bay
16. Watts Bay
17. Cat Creek
18. Gunboat Point
19. Wallops Island
20. The Four Mouths
21. Cockle Creek
22. Chincoteague Inlet

There is given below a list of names in use locally to designate certain of the features on this sheet. It is recommended that they be accepted for this reason.

1. Willis Point .
2. Walkers Point .
3. Walkers Marsh .
4. Sloop Gut .
5. The Sods .
6. Kill-deer Shoal
7. Wisherts Point. .

LANDMARKS:

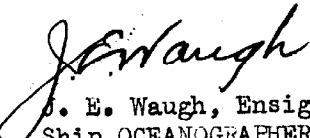
All landmarks to charts on this sheet have been previously reported in a separate report and in the descriptive reports for Graphic Control Sheets Nos. C, D, and E. ✓

AIDS TO NAVIGATION:

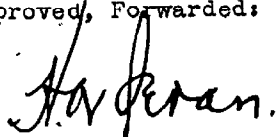
There are four buoys that fall on this sheet. They are shown by the symbol for buoy, striped vertically. They mark the deepest water through Chincoteague Inlet to a point just off Chincoteague Point. These aids are subject to frequent changes depending on the changes in the channel. ✓

All other aids to navigation on this sheet have been previously reported in a separate report and in the descriptive reports for Graphic Control Sheets Nos. C, D. and E. ✓

Respectfully Submitted,


J. E. Waugh, Ensign, C&GS.,
Ship OCEANOGRAPHER.

Approved, Forwarded:


H. A. Seran, Comdr., C&GS.,
Commanding Ship OCEANOGRAPHER.

STATISTICS FOR SHEET NO. 11

Date 1934	Day Letter	Statute Miles of Sdg. lines.	No. of Soundings.	No. of Positions.	
August 25	a	0.0	0	32	
August 27	b	8.2	740	114	
August 28	c	1.9	125	19	
August 29	d	10.4	943	150	
August 30	e	7.9	498	99	
August 31	f	9.3	502	90	
Sept. 5	g	9.0	517	100	
Sept. 6	h	10.4	358	70	
Sept. 7	j	5.7	238	44	
Sept. 11	k	13.6	607	105	
Sept. 12	l	9.8	383	77	
Sept. 14	m	17.4	597	109	
Sept. 15	n	18.4	545	102	
Sept. 19	p	17.3	676	137	
Sept. 26	q	12.0	553	115	
Sept. 27	r	10.8	500	76	
October 1	s	9.8	446	103	
October 3	t	16.6	670	133	
October 4	u	12.0	553	127	
October 10	v	14.5	720	125	
October 11	w	13.4	589	128	
October 12	x	17.3	758	126	
November 8	y	0.0	28	8	
November 9	z	0.0	187	59	
August 25	a'	0.0	130	0	Area Survey 7.0 Square Miles.
October 17	b'	0.0	30	0	
Totals		245.7	11,893	2,248	

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5716

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	2248
Number of positions checked	257
Number of positions revised	1
Number of soundings recorded	1093
Number of soundings revised	88 + 431 fractions to delineate curves
Number of signals erroneously plotted or transferred	0

Date: **JUNE 28, 1935**

Verification by L.B. BERES
James Cornish

Review by H.W. Murray

Ver. Corrections by "

Time: 244 hrs + 27 hrs. } 51 1/2 } 432
 22 hr. } 22 }
 Time: 25 hrs.
 " 142 ..

June 26, 1935

VERIFIER'S REPORT H-5716

The records conform to the requirements of the General ~~ix~~ Instructions.

The usual depth curves cannot be completely drawn ^{but} due to the nature of the hydrography. the zero + six foot curves had to be dashed in several places.

The field plotting was complete to the extent prescribed in the Hydrographic Manual with the exception of the shoeline noted below.

The drafting all had to be done in the office as the shoeline had not been accurately checked and there were several apparent discrepancies.

Junctions with adjacent sheets not determined. ~~no sheet to south.~~
See Rev. for 3 adjoining sheets.

Remarks.

Position 49e was replotted to check the boat sheet.

Position 4-5n 9 foot sounding in the midst of 13 and 14 foot soundings. crosslines run over this area did not reveal any

depth corresponding to this shoal sounding. An overlay of additional work further defined this area and no shallow soundings were found. This sounding therefore is apparently

in error and should be rejected. *Idly Rejected. H. B. Beres.*

~~It was not re~~ Soundings for t and u days were not revised by ^{field} smooth sheet plotter after tide reduction had been changed.

This quality was not available at time of review. However, field party checked this only in detail on page 3, per 5 of the D.R. H. B. Beres.

Respectfully submitted

L. B. Beres.
L. B. Beres

Original verifier did not plot 1/2 foot soundings. These were correctly plotted later. Sept. 26 1935 James Cornwell.

Date. April 15, 1935GEOGRAPHIC NAMES
VIRGINIASurvey No. H 5716Chart No. 1220 & 1221Diagram No. 1220-2 & 1221-2

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Watts Bay</u> ✓ ✓	Same			
	<u>Kendall Narrows</u> ✓ ✓	"			
	<u>Cockle Creek</u> ✓ ✓	"			
	<u>Willis Point</u>		Same		
	<u>Chincoteague Island</u> ✓	Same			
	<u>Kill-deer Shoal</u>	<u>KILLDEER SHOAL</u> ✓	Same		
	<u>Assateague Inlet</u> ✓ ✓	Same			
	<u>Assateague Island</u> ✓ ✓	"			
	<u>Assateague Point</u> ✓ ✓	"			
	<u>The Sods</u>		Same		
	<u>Chincoteague Point</u> ✓	Same			
	<u>Walkers Point</u>		Same		
	<u>Sloop Gut</u>		"		
	<u>Ballast Narrows</u> ✓ ✓	Same			
	<u>The Four Mouths</u> ✓ ✓	"			
	<u>Roots Narrows</u> ✓ ✓	"			
	<u>Walkers Marsh</u>		Same		
	<u>Powells Bay</u> ✓ ✓	Same			
	<u>Wishert Point</u>		Wisherts Point		
	<u>Bogues Bay</u> ✓	Same			
	<u>Taylors Narrows</u> ✓ ✓	"			

VIRGINIA

Diagram No. 1221-2 & 1220-2

Under investigation. Q

(N-136)

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 20, 1935

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
7 volumes of sounding records for


HYDROGRAPHIC SHEET 5716

Locality: Assateague Anchorage to Bogue Bay, Virginia Coast

Chief of Party: H. A. Seran in 1934
Plane of reference is mean low water, reading
4.6 ft. on tide staff at Assateague Anchorage
8.8 ft. below B.M. 15
3.4 ft. on tide staff at Chincoteague Point (1st staff)
7.9 ft. below B. M. 1
4.8 ft. on tide staff at Chincoteague Point (2nd staff)
7.9 ft. below B. M. 1
1.5 ft. on tide staff at Bogue Bay
5.0 ft. below B. M. 1
1.9 ft. on tide staff at Ballast Narrows
4.8 ft. below B. M. 1

Height of mean high water above plane of reference is 3.7 feet at Assateague Anchorage; 2.6 feet at Chincoteague Point; 3.0 feet at Bogue Bay; 2.9 feet at Ballast Narrows.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

KTH
8

80-DRM

November 12, 1955.

To: Commanding Officer,
U. S. Coast and Geodetic Survey,
Ship OCEANOGRAPHER,
c/o Postmaster,
Norfolk, Virginia.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Hydrographic survey H 5716 (field No. 11) -- Cables.

Your hydrographic survey H 5716 (field No. 11), Assateague Anchorage to Bogues Bay, is being reviewed at this time. This sheet was surveyed by J. E. Waugh and pretracted by A. P. Grisfield.

The smooth sheet shows two submerged cables between Chincoteague Point and Gunboat Point which differ both in azimuth and geographic position from the cable area shown on chart No. 1221.

No authority for the smooth sheet positions could be found in the records or on the boat sheet. You will please submit further information regarding these cables in order that they may be properly charted.

(Signed) R. S. PATTON

Director.

80.
POST-OFFICE ADDRESS: c/o Postmaster, Norfolk, Va.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

82-CKG-28
1075 NOV 18 1935
DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
Ship OCEANOGRAPHER

Ref.
2321

November 14, 1935.

To: The Director,
U.S. Coast and Geodetic Survey,
Washington, D. C.

From: The Commanding Officer,
U.S.C. & G.S.S. OCEANOGRAPHER.

Subject: Hydrographic survey H 5716 (field No. 11) -- Cables.

Reference: 80-DRM; 12 November 1935.

The cables that should be shown on this sheet are two telephone lines that cross from Chincoteague Point to Gunboat Point. They are roughly parallel. The ends were spotted on the boat sheet at the time of the survey and were transferred to the smooth sheet and the cable area drawn in. A check on the Chincoteague Point side can be obtained from the original level record for the tide gage located off Chincoteague Point. The bench marks for this gage are referred to these lines and Chincoteague Point Beacon. *

The best that can be remembered now, the eastern most line on Gunboat Point side leaves the water just westward of the eastern side of the sand dunes on this point. The western line is about the same distance west of the other line as it is on the Chincoteague Point side.

H. A. Seran

H. A. Seran, Comdr., C&GS.,
Commanding Ship OCEANOGRAPHER.

Approved by H.A.S.

JEW/T

*Smooth sheet position changed to agree with above information. That is: the "S" end was accepted as plotted by the field party although no point could be found on the Boat Sheet. The "N" end was changed to agree with reference point described in the "Tide Level Record" (Library No. T-2572, H. A. Seran, 1934). As originally plotted, the "N" end was shifted approx. 30m. S.E.

H. A. Seran
1/16/36

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5716 (1934) - FIELD NO. 11

Assateague Anchorage to Bogues Bay, Chincoteague Inlet, Virginia
Surveyed in 1934

Instructions dated April 27, 1933; June 19 and August 31, 1934
(OCEANOGRAPHER)

Hand Lead and Pole Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - H. A. Serano.

Surveyed by - J. E. Waugh.

Protracted by - A. P. Crisfield.

Soundings penciled by - J. E. Waugh.

Verified and Inked by - L. B. Beres and J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. Descriptive notes recorded in the records such as piling and breakers were not consistently plotted on the smooth sheet. This was accomplished in the office.
- b. Soundings on A' day (positions 1 to 21) obtained at the Coast Guard dock in Assateague Anchorage were not plotted on the smooth sheet. This was accomplished in the office on an appropriate insert.
- c. No authority could be found in the records nor on the boat sheet nor contemporary topographic surveys for the two submerged cables shown on the smooth sheet between Gunboat Point and Chincoteague Point. These cables also differ in azimuth and geographic position from the cable area defined on Chart 1221. This matter has been referred to the field party.

Smooth sheet
position of
cable changed
to agree with
information
shown on boat
sheet and level
Book. See
letter attached
to this report
dated Nov. 4,
1935

The shoreline was left in pencil by the field party because of difficulties encountered in fitting the hydrography to the air photo compilation. The inking was accomplished in the office.

The "Descriptive Report" is clear and unusually comprehensive, and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project except that the small middle ground in Cackle Creek in lat. 37° 54.9', longitude 75° 26.6' should have been fully developed on the eastern side.

3. Shore Line and Signals.

The shore line shown on this sheet is from Air Photo Compilations: T-5193 (1933) and T-5201 (1933). The signals used are from Graphic Control surveys: T-4914 (1934), T-6235 (1934), T-6236 (1934), and T-6237 (1934).

4. Sounding Line Crossings.

Sounding line crossings are generally satisfactory. A number of discrepancies were noted by the field party. Office dispositions are noted in the Descriptive Report (pages 2 and 3).

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn.

6. Junctions with Surveys.

- a. The junctions on the north with H-5769 (1934) and on the south with H-5703 (1934) are satisfactory.
- b. The junction with H-5714 (1934) on the south is satisfactory except that the 12 foot sounding of H-5714 (1934) in lat. $37^{\circ} 52.6'$, long. $75^{\circ} 23.8'$ as well as the 8 foot sounding on the present survey in lat. $37^{\circ} 52.6'$, long. $75^{\circ} 23.5'$ appear to be illogical, both falling in depths of about 1 fathom deeper. However, the U. S. Army Engineer's survey of 1926 (Bp. 21178) shows depths of 3 to 5 feet in the vicinity of the 12 and about 7 feet in the vicinity of the 8. Comparison of other soundings in the general vicinity reveals considerable changes in depths with those on the present survey being deeper. The 12 and 8 are probably on hard spots which have not worn away at the same rate as other nearby depths and have, therefore, been retained.
- c. There are no contemporary surveys to the southward of the present survey in the creek in lat. $37^{\circ} 51.6'$, long. $75^{\circ} 28.6'$. However, for charting purposes, a satisfactory junction can be made with the U. S. Army Engineers' survey of 1931 (Bp. 24283) which covers this area.

7. Comparison with Prior Surveys.

- a. H-297 (1851) and H-298 (1851).

These surveys cover the general vicinity of Chincoteague Inlet and Assateague Anchorage. Excessive changes in depths and

shoreline are noted in comparison with the present survey. The long arm that separates Assateague Anchorage from the Atlantic Ocean is a new development and is not shown on the 1851 surveys. Because of the time elapsed between the earlier surveys and the present survey, and the general changeability of the area, it is unnecessary to consider in detail the various changes noted. The present survey should supersede the above surveys for charting purposes.

b. H-1455a (1880), H-1487 (1881-87), and H-2615 (1902).

These surveys cover the main portion of the present survey in the area eastward of long. $75^{\circ} 27'$. Comparison with the present survey reveals numerous changes in depths and considerable changes in shoreline. For example: H-1487 (1881-87) and H-2615 (1902) show depths of 22 to 25 feet where the present Coast Guard Station is located, and Assateague Point on all three of the prior surveys is shown $\frac{1}{2}$ mile farther westward of the position shown on the present survey. All important soundings and shoals located on the above surveys are adequately covered on the present survey and should be superseded by the latter survey for charting purposes.

c. H-1803 (1887-88).

The few soundings on this survey cover the bays and principal streams to the westward of long. $75^{\circ} 27'$. This is a well protected area and soundings are generally in close agreement with those of the present survey.

d. H-3173 (1910) and H-3308 (1911).

These surveys cover Chincoteague Inlet and Assateague Anchorage. Depths in the deep channel and on the extensive shoal area to the southwestward of the channel are in fair agreement with H-5716 (1934). Other areas, however, show considerable changes in depth and shore line. Assateague Point extends $\frac{3}{4}$ mile westward to the small island shown here on the present survey, and Fishing Point is shown approximately 1 mile southeast of its position on the present survey. The larger scale development of the present survey adequately covers the important features shown on the above surveys and should supersede those surveys for charting purposes.

e. H-3774 (1915).

This 1 to 20,000 scale survey covers Chincoteague Inlet and Assateague Anchorage. Depths in several shoal areas and channels are in close agreement with the present survey. However, con-

siderable differences in depths and shoreline are noted in other areas and a detailed comparison will serve no useful cartographic purpose. The high water area between Fishing Point Light and signal Ban on the present survey is a recent development; depths of 10 to 21 feet are shown here on H-3774 (1915). This survey contains no important shoals or soundings that are not covered by the present survey or other surveys discussed in subsequent paragraphs of this review and should be superseded by H-5716 (1934) for charting purposes.

8. Comparison with Chart No. 1221 (Corrected to June 15, 1934).

a. Hydrography.

Soundings shown on the chart originate with surveys discussed in preceding paragraphs of this review and several U. S. Army Engineers' surveys of 1924 and 1926 (Bps. 19230 and 21178, respectively). Bp. 21178 covers the area to the northeast and eastward of Gunboat Point; Bp. 19230 covers the same area but also includes the area northward of Wallops Island and also Assateague Inlet. Comparison with the present survey reveals general agreement within 1 to 2 feet in the broad flat areas and in the major portions of the main channels; however, in other areas considerable changes in depths and shore line are noted. Bp. 21178 shows a channel with depths of 22 feet in lat. $37^{\circ} 53.3'$, long. $75^{\circ} 25.2'$ whereas the present survey shows this channel about 100 m. due north and with average depths of about 15 feet. Fishing Point as shown on the present survey is approximately 0.3 miles northwest of that shown on Bp. 21178. No indications are shown on the Engineers' survey of the two channels shown on the present survey in the vicinity of lat. $37^{\circ} 52.6'$, long. $75^{\circ} 23.6'$. These Engineers' surveys show a number of shoal spots bearing from 0.1 to 1.0 feet at low water. In most cases, similar depths or depths differing by not more than 1 to 2 feet were obtained close by on the present survey. Within the area covered, the present survey should supersede the above surveys for charting purposes.

b. Controlling Depths in Channels.

The controlling depth in the dredged channel on the present survey in lat. $37^{\circ} 51.9'$, long. $75^{\circ} 28.3'$ is 4 feet, which agrees with the charted depth of 4 feet as of August, 1931. (Authority: Bp. 24283, 1931).

c. Aids to Navigation.

- (1) The 4 buoys located on the present survey in the main channel have been removed from the latest edition of Chart 1221 (Corrected to July 11, 1935) and are covered by a general note: "Buoys are not charted because they are frequently changed in position."

- (2) Beacons located on the present survey are in positions differing 100 to 180 m. from those charted except Fishing Point Light which differs by 400 m. This excessive difference is due to the further building up of Fishing Point in a northwest direction from that shown on the chart. All of the above differences are undoubtedly due to local shifting of positions consistent with bottom changes.

9. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

Aside from the middle ground in lat. 37° 54.9', long. 75° 26.6', which should have been developed on the eastern side, the survey is complete and no additional field work is required.

11. Superseding Previous Surveys.

Within the area covered, the present survey supersedes the following surveys for charting purposes:

H- 297 (1851)	in part.	H-2615 (1902)	in part.
H- 298 (1851)	" "	H-3173 (1910)	" "
H-1455a (1880)	" "	H-3308 (1911)	" "
H-1487 (1881-87)	" "	H-3774 (1915)	" "
H-1803 (1887-88)	" "		

12. Reviewed by - Harold W. Murray, October 28, 1935.

Inspected by - A. L. Shalowitz.

Examined and Approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

B. Borden
Chief, Section of Field Work.

K. T. Adams
Acting Chief, Division of Charts.

G. Thude
Chief, Division of H. & T.

Applied to drawing of Chart 1220 - June 2, 1936 - J.S.W.